

CTIP Improvement Concepts Part I

Draft

9-13-2005

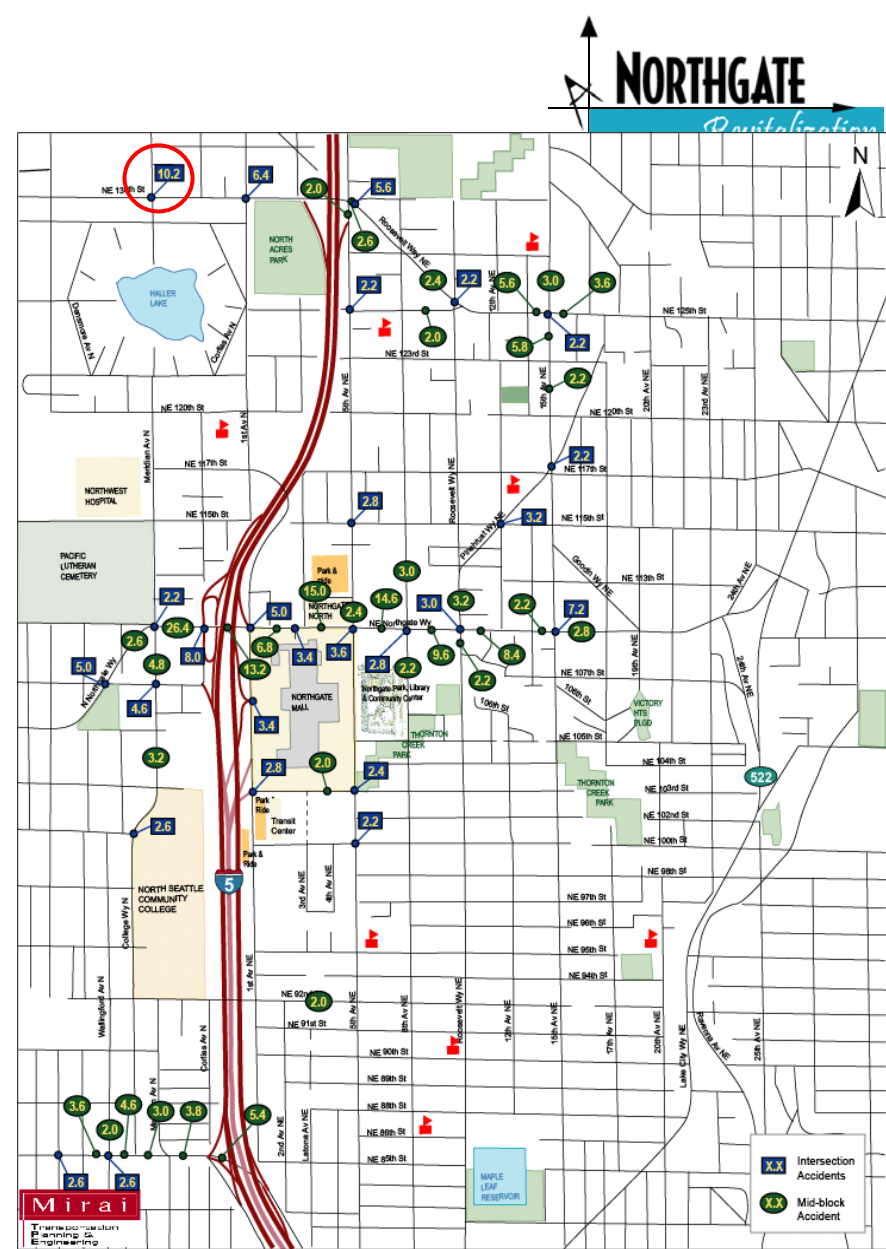
Corridors

- Part I (September 13)
 - NE 130th/ 125th Street Corridor
 - Non-Arterial Streets
 - West of I-5
 - NE 92nd Corridor
- Part II
 - Northgate Way Corridor
 - Transit Center/ Light Rail Station Area
 - 15th Avenue Corridor
 - Roosevelt Way Corridor
 - 5th Avenue Corridor

NE 130th St/ NE125th St Corridor

NE 130th/ 125th St Corridor

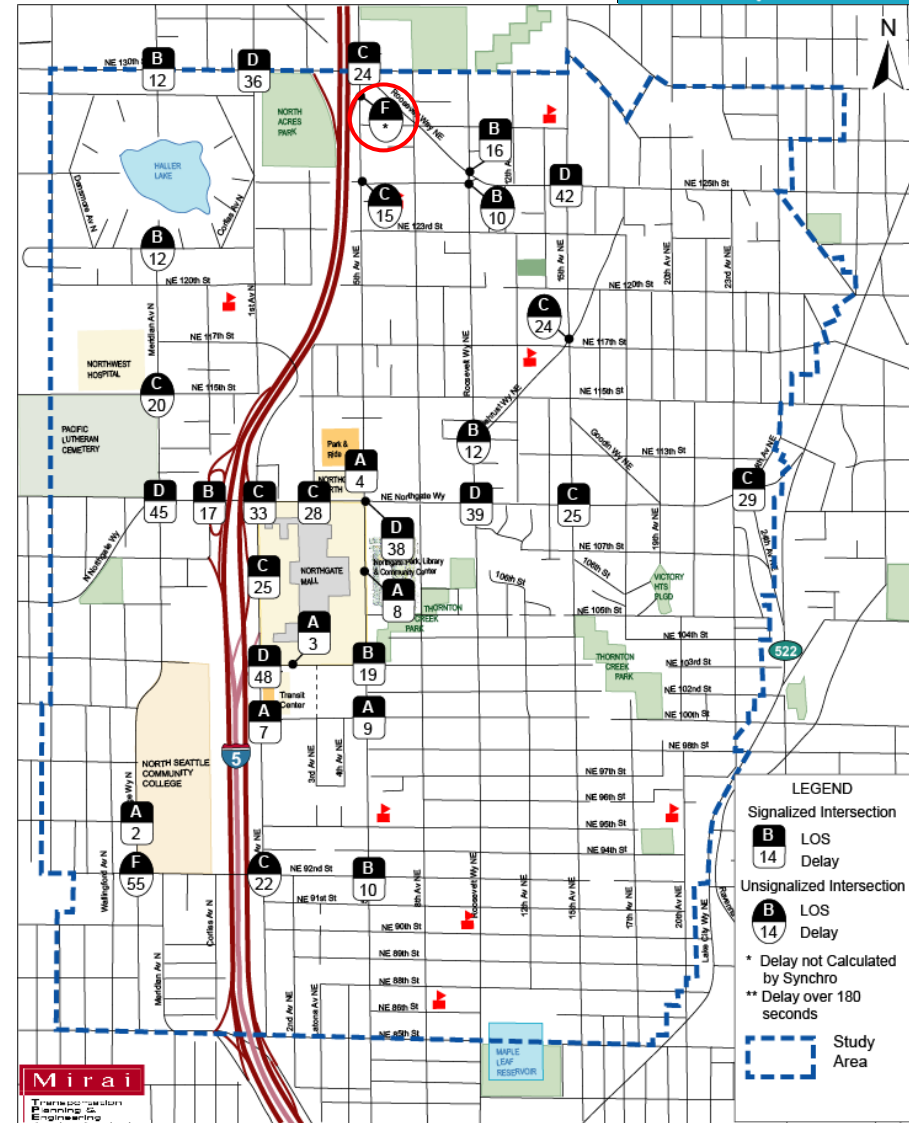
- High accident location:
 - NE 130th St/ Meridian Ave intersection: 10 per year



NE 130th/ 125th St Corridor

- Low level of service
 - Northbound I-5 Off-ramp and 5th Ave: Existing LOS F
 - Northbound I-5 Off-ramp and 5th Ave: 2030 LOS - long delay

Existing Level of Service (2004)



NE 130th/ 125th St Corridor

- **Unprotected left turns**
 - Westbound-to-southbound left turns on 130th St at I-5 On-ramp
 - Eastbound-to-northbound left turns on 130th St at 5th Avenue



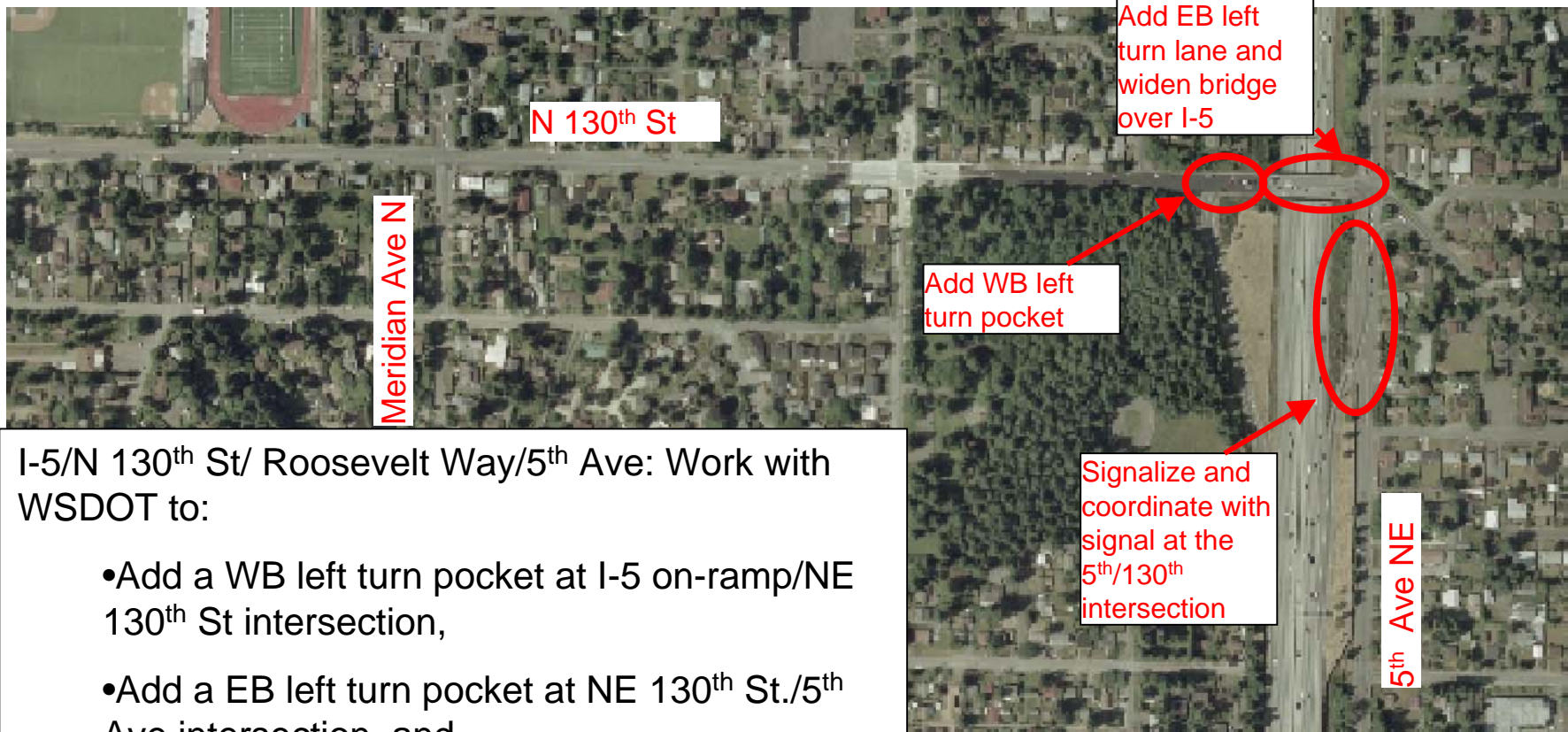
NE 130th/ 125th St Corridor

- Intersections spaced too closely:
 - Roosevelt Way, NE 125th St, 10th Ave NE intersections:





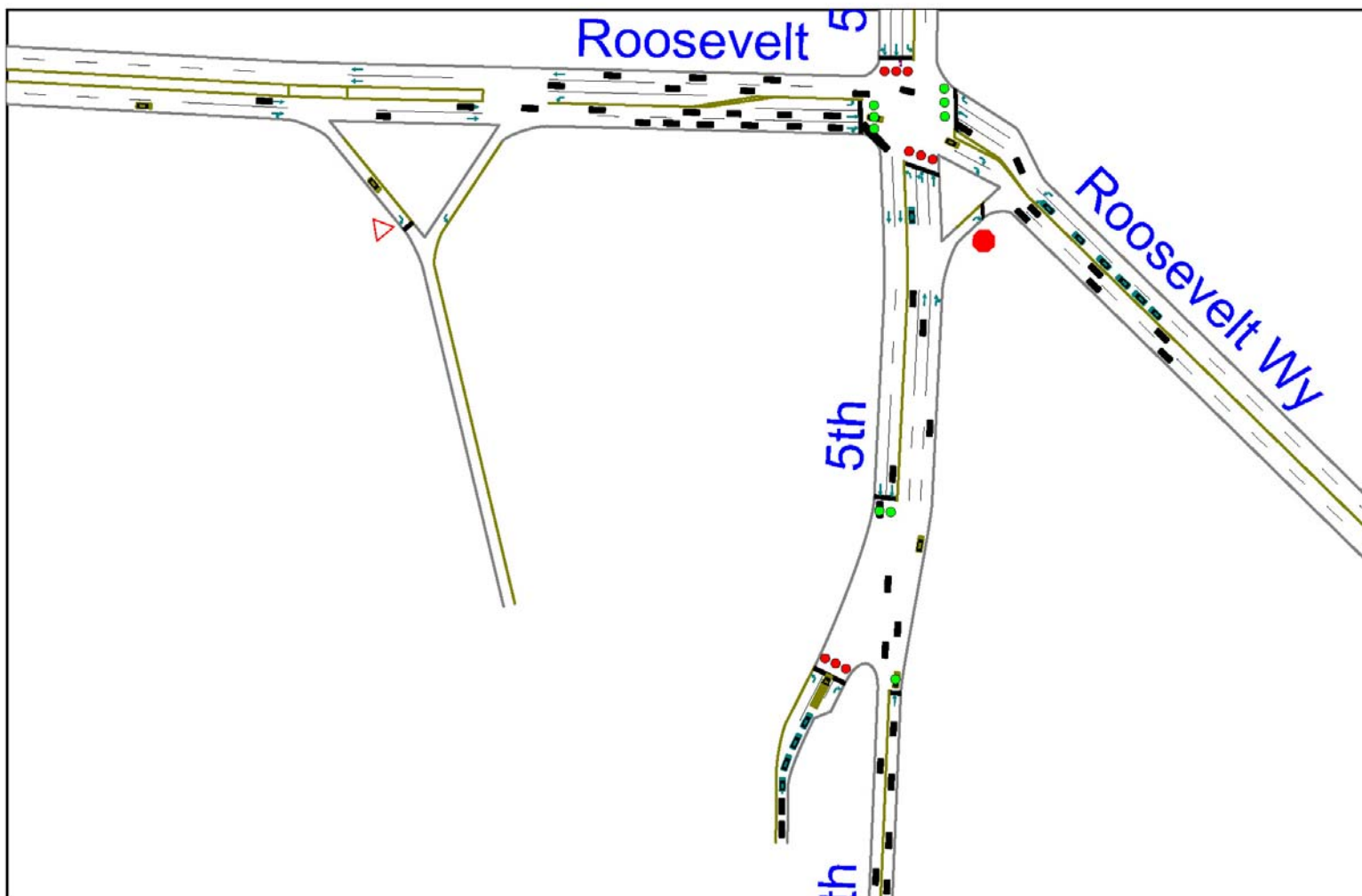
N 130th/Meridian Ave N: Add left turn pockets on all approaches



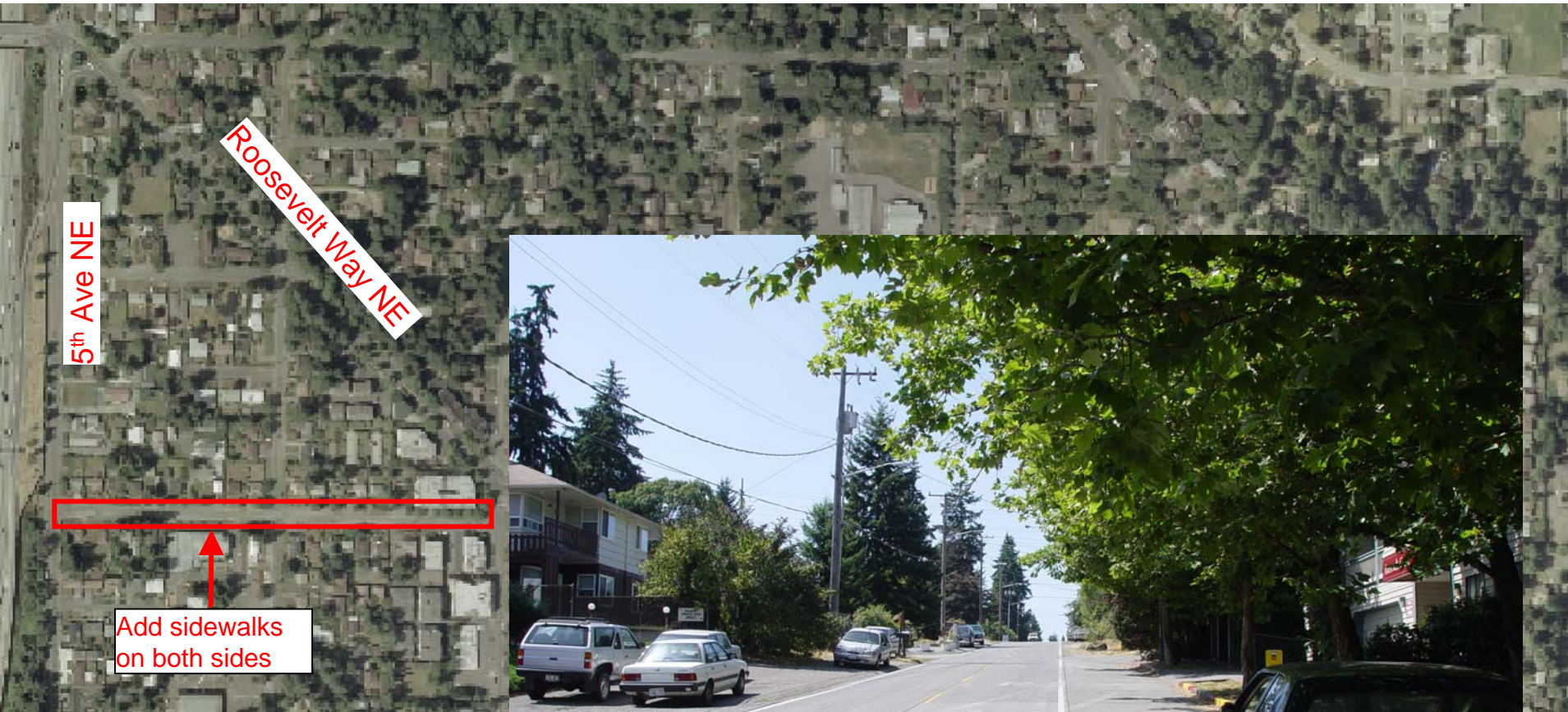
I-5/N 130th St/ Roosevelt Way/5th Ave: Work with WSDOT to:

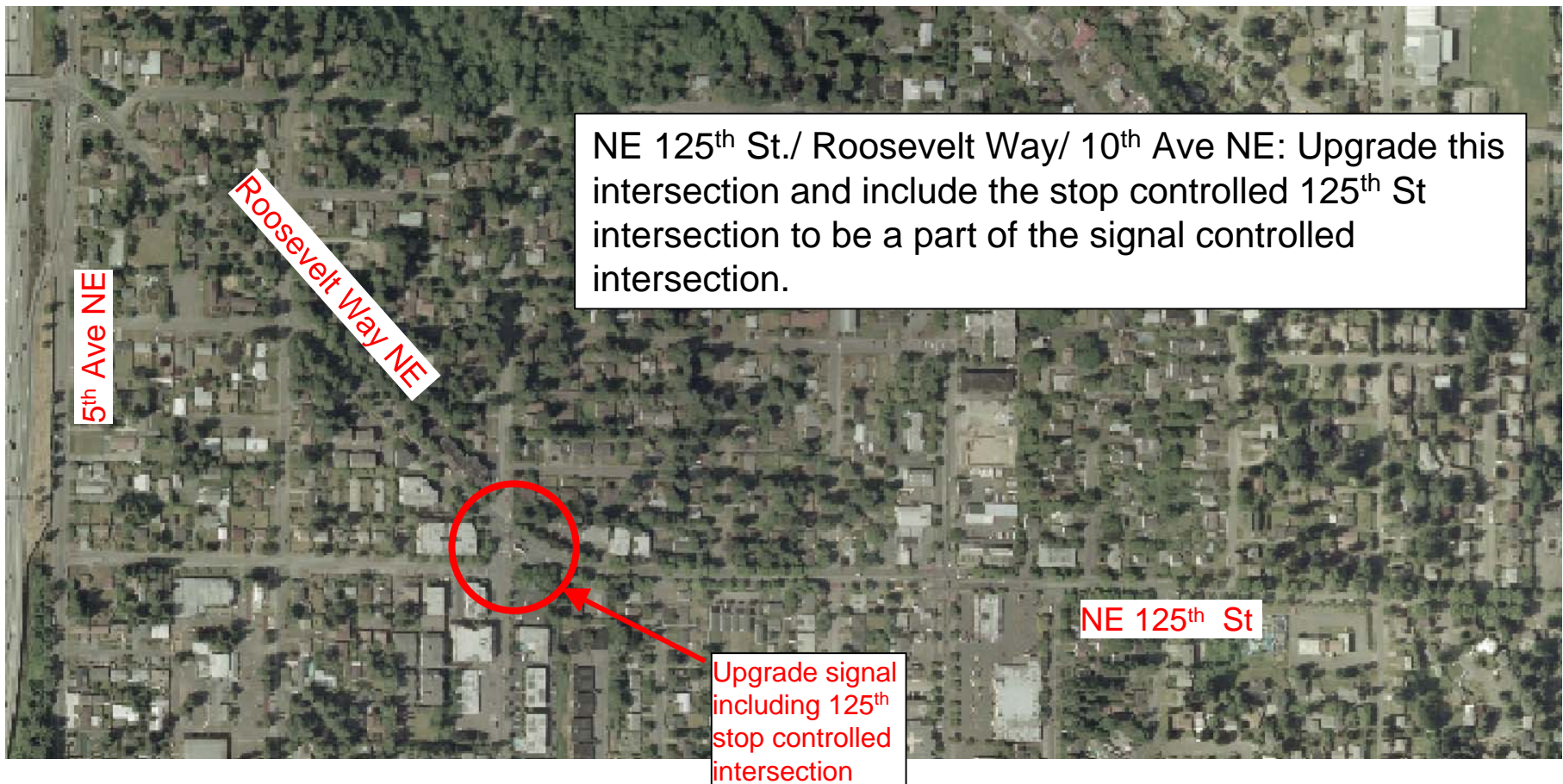
- Add a WB left turn pocket at I-5 on-ramp/NE 130th St intersection,
- Add a EB left turn pocket at NE 130th St./5th Ave intersection, and
- Install a signal at I-5 off-ramp/5th Avenue and coordinate this new signal with the existing 130th/5th Ave signal

Screen Shot of Traffic Simulation Model



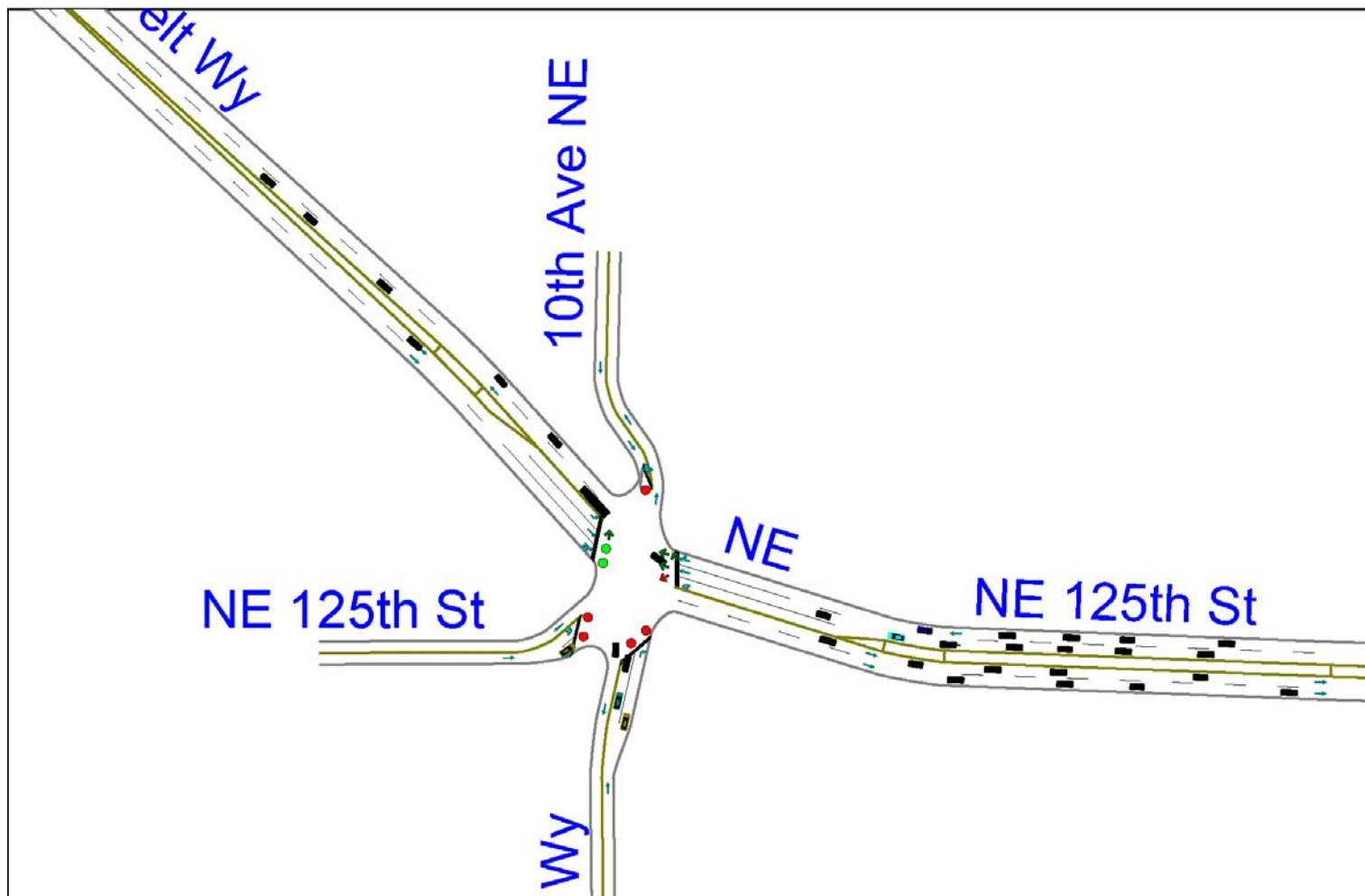








Screen Shot of Traffic Simulation Model





NE 125th St / 15th Ave NE: Upgrade the existing signal with vehicles detectors and optimize signal operation

Non-Arterial Streets

Neighborhood Streets

■ Major issues

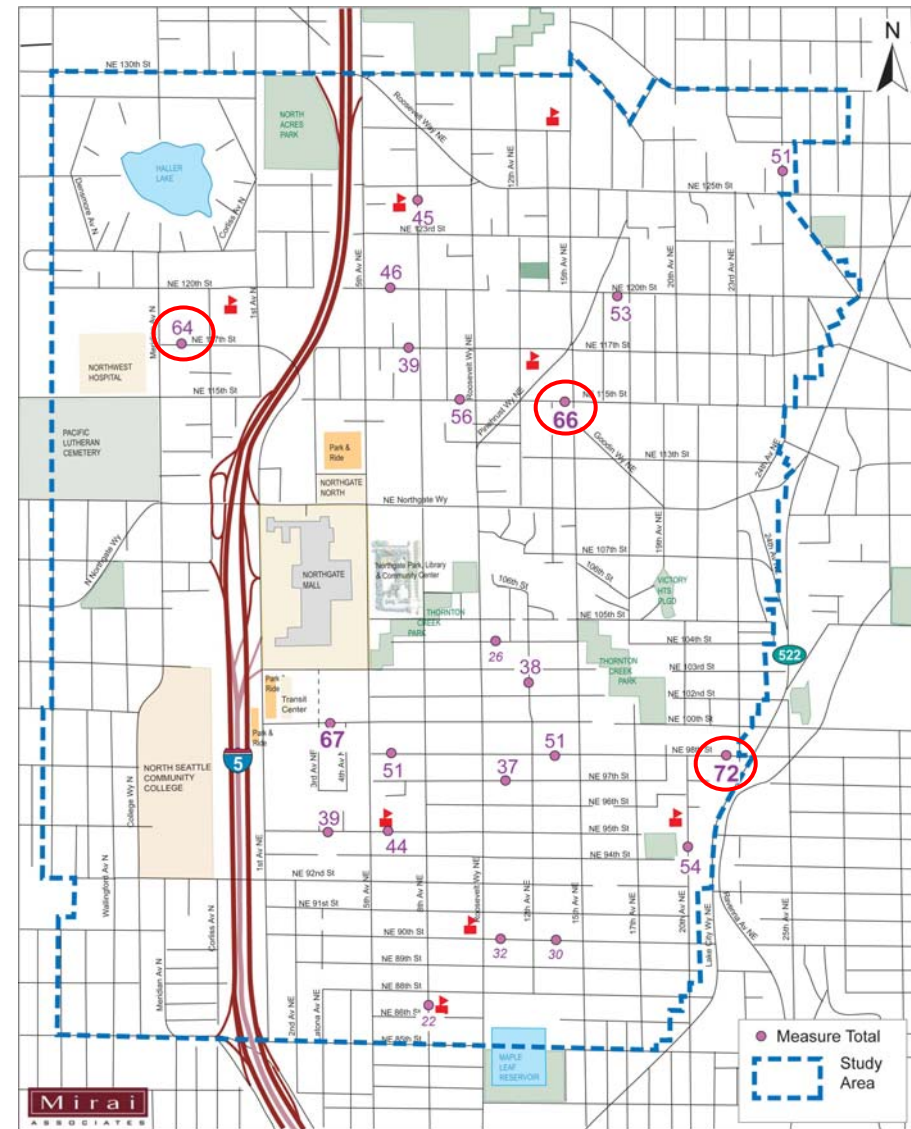
- Speed
- Traffic volumes
- Lack of pedestrian facilities
- 50% of school walk routes lack sidewalks

Indicator	Minimum and Maximum Points	Definition of Point Allocation
Vehicle Volume (Weekday 24 hour)	0 to 20	1 point assigned for every 100 vpd
Speed (85 percentile)	0 to 20	1 point assigned for every one mph over 20 mph
Pedestrian Facility (Sidewalks and walkways)	0 to 20	No curb, gutter & sidewalk or walkway on both sides = 20 points A walkway on one side = 15 points A curb, gutter & sidewalk on one side = 10 points A curb, gutter & sidewalk on one side and a walkway on the other side = 5 points Curbs, gutters and sidewalks on both sides = 0 points
Collision	0 to 10	2 points assigned for each reported collision over past three years
School Walkway Route	0 or 10	10 points assigned for the designated school route
Pedestrian Route	0 or 10	10 points assigned for the key pedestrian connector designated by Northgate Open Space & Pedestrian Connections
Bicycle Route	0 or 5	5 points assigned for the bike route
Street Feature	0 or 5	Up to 5 points assigned for features that might negatively impact safety of pedestrians such as poor sight distance, sharp curbs and wide street width

Non-Arterial Streets

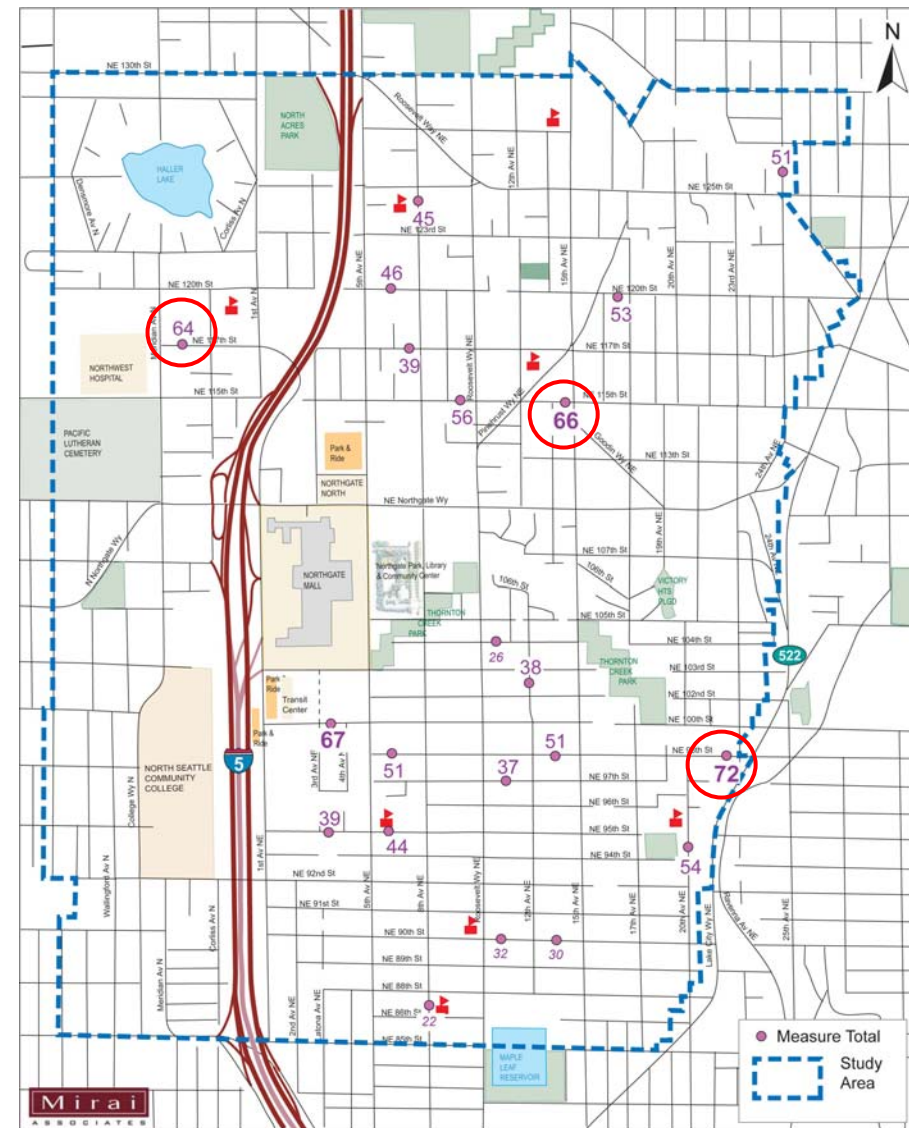
Score distribution
for 21 locations
(lower is better):

< 30	2
30 – 40	6
40 – 50	3
50 – 60	7
> 60	3



Non-Arterial Streets

- Neighborhood street indicators with high score (poor performance):
 - NE 98th St between 15th Ave NE and Lake City Way
 - NE 115th St between 15th Ave NE and Lake City Way
 - NE 117th St between Meridian Ave N and 1st Ave N
- About a half of the school walk routes have sidewalks on one side:
 - The performance goal: 90 percent



Pedestrian Crossings

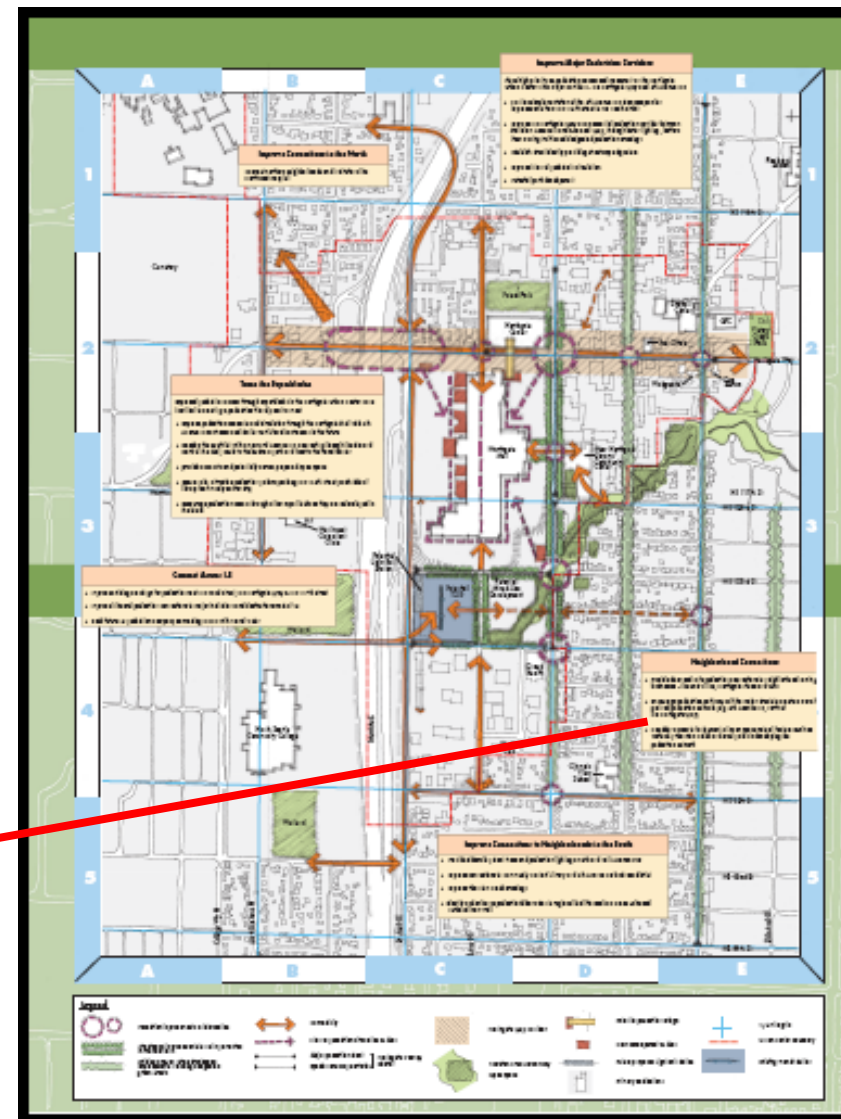
- Analyzed pedestrian street crossings at the following locations:
 - Northgate Way Corridor:
 - I-5 Southbound ramps, 1st Avenue NE, 3rd Avenue NE, 5th Avenue NE, 8th Avenue NE, Roosevelt Way, and a section between 5th Avenue and 7th Avenue
 - 5th Avenue NE Corridor
 - Northgate Way, NE 106th Street (Community Center), NE 103rd Street, NE 100th Street, NE 92nd Street, NE 105th Street, NE 112th Street, NE 85th Street
 - 8th Avenue NE Corridor
 - North of Northgate Way NE to Post Office
 - Roosevelt Way Corridor
 - Street sections between NE 112th Street and Northgate Way, and between NE 88th Street and NE 92nd Street
 - 15th Ave NE Corridor
 - North of NE 94th Street, access to Sacajawea Elementary School, NW Puppet Center, NE 117th Street – NE 125th Street
 - 3rd Avenue Corridor
 - NE 100th Street, NE 103rd Street
 - Meridian Avenue N Corridor
 - A section between N 103rd Street and N 105th Street, 115th Ave N/Meridian Ave N

Neighborhood Connections

- Implement recommendations of the Open Space and Pedestrian Plan

Neighborhood Connections

- Provide clear and safe pedestrian connections to neighborhood serving businesses – the Post Office, Northgate Plaza and QFC
- Encourage pedestrian pathways off the major streets to create a more fine grained pedestrian network (e.g. 8th Avenue NE, north of NE Northgate Way)

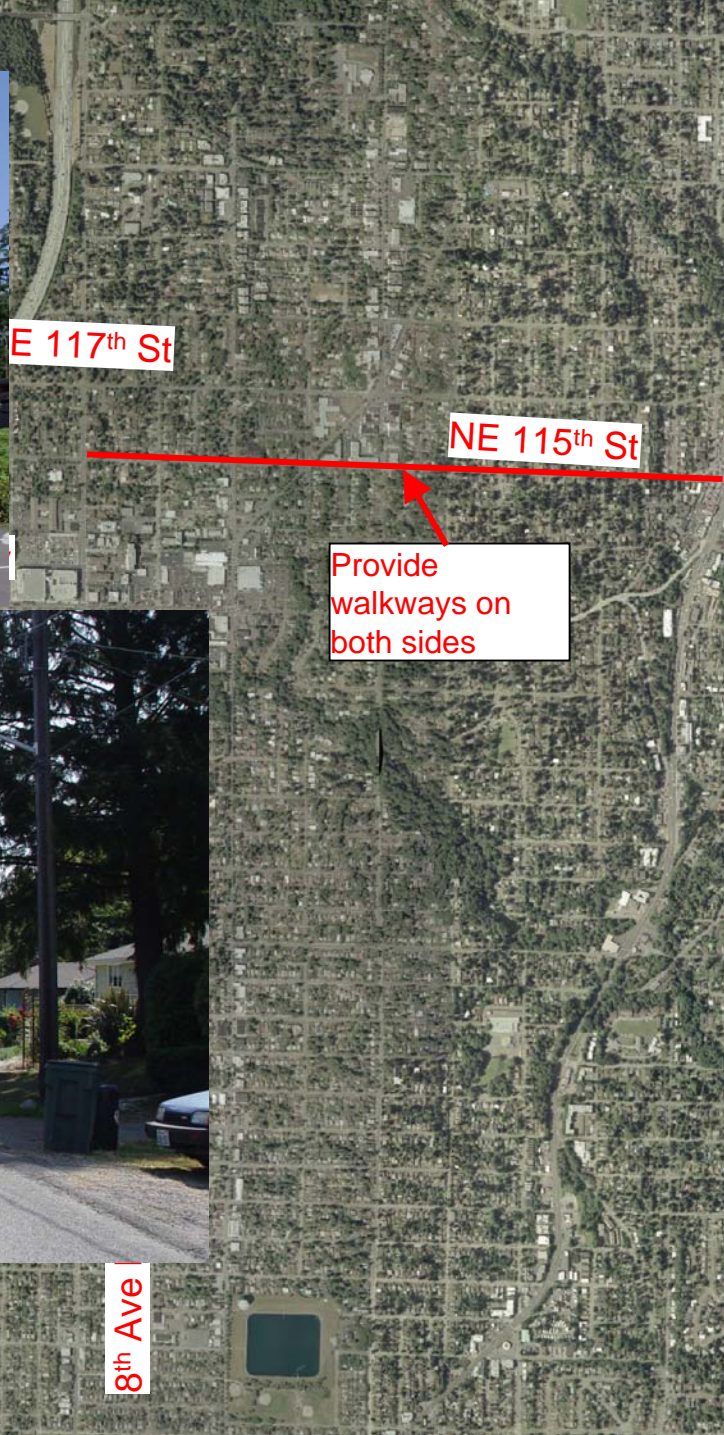


N 117th St from 1st Ave N to Meridian Ave N: Add a raised walkway on the north side of the street and place speed humps (cushion)



NE 115th St from 5th Ave NE to Lake City Way: Provide raised walkways on both sides of the street. Restrict On-street parking to one side.





E 117th St

NE 115th St

Provide
walkways on
both sides

8th Ave

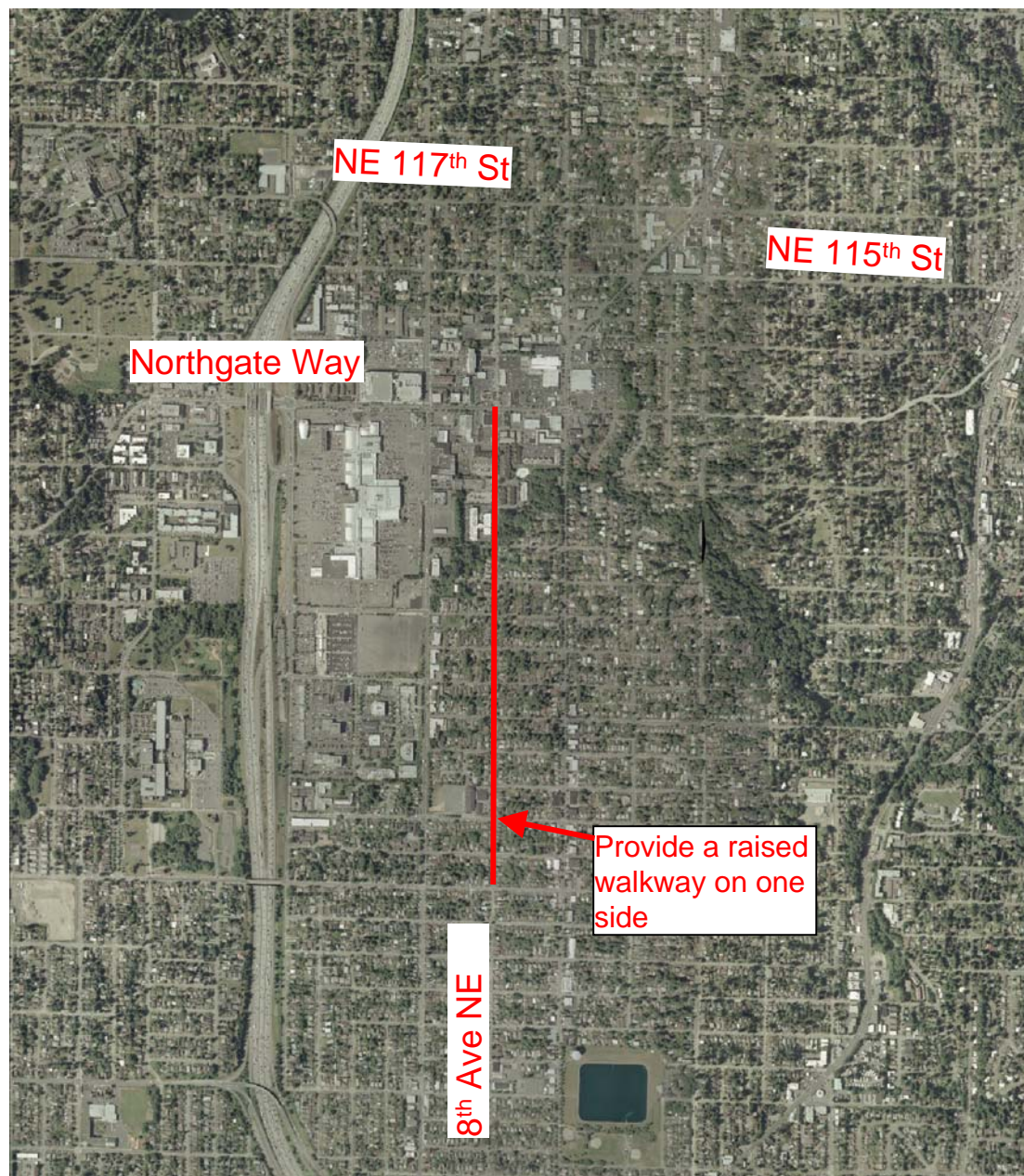
8th Ave NE between
Northgate Way and NE
115th Street: Provide a mid-
block pedestrian crossing
with in-pavement lights





*8th Ave NE in the vicinity of
the proposed mid-block
pedestrian crossing*

8th Ave NE from Northgate Way to NE 92nd St: Provide a walkway on one side of the street





An example of 8th Ave NE walkway



NE 98th Street at Lake City Way, looking east

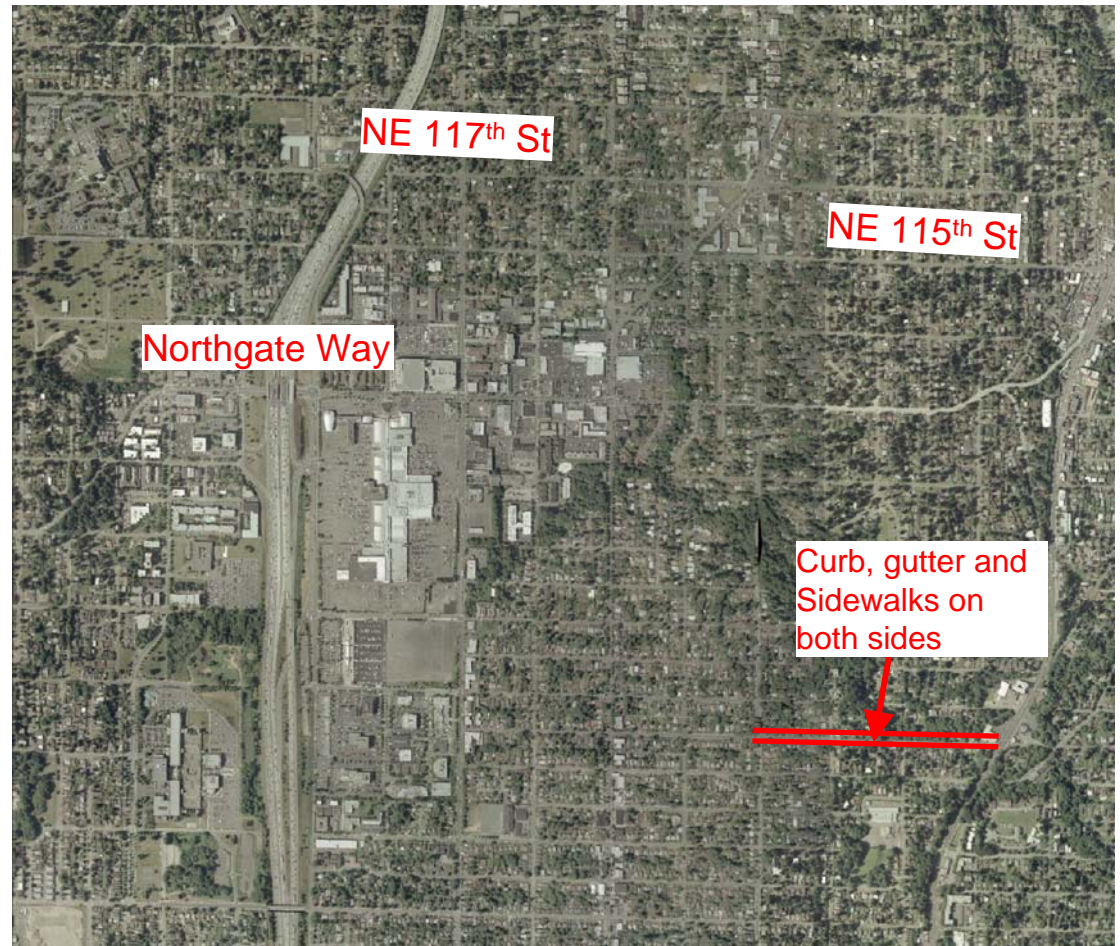


NE 98th Street looking west from west of Lake City Way



NE 98th Street looking east at 15th Ave NE

Provide curbs, gutter and sidewalks on both sides of NE 98th St from 15th Ave NE to Lake City Way. Allow on-street parking. Integrate traffic control devices with the sidewalk improvements



West of I-5

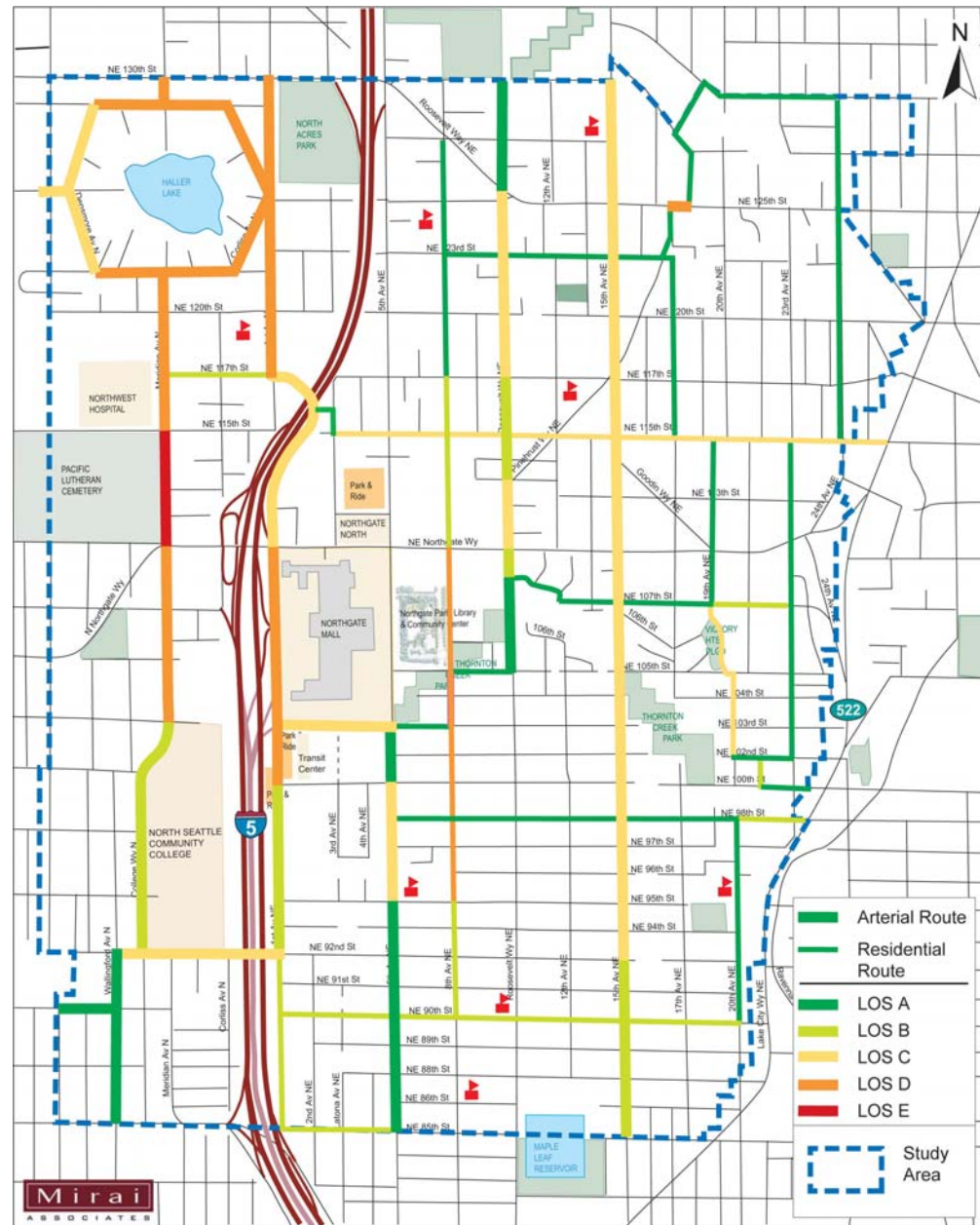
West of I-5

- Low Bike Index (level of service)
 - Meridian Avenue/ 1st Ave west of I-5 scored poorly: LOS D and E
 - Factors:
 - Limited riding space
 - Higher traffic & speeds

Benchmarks:

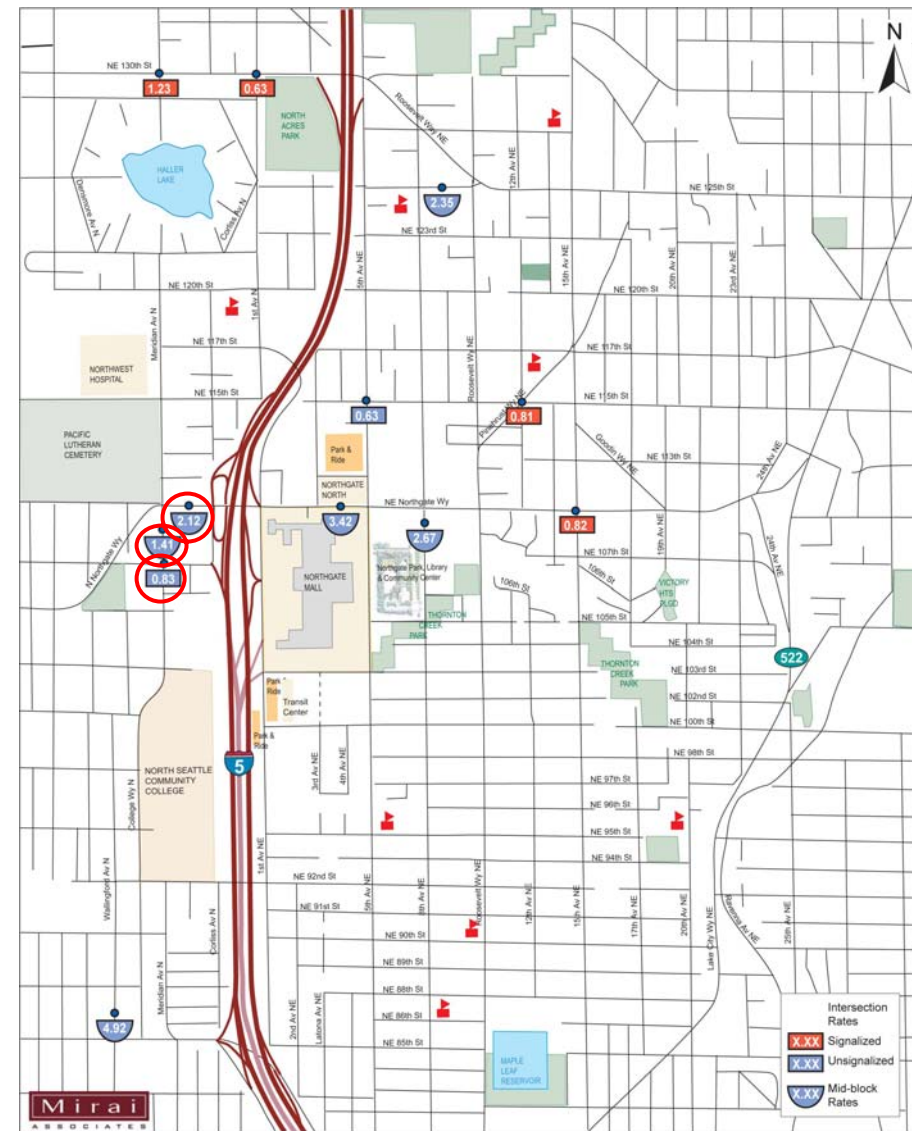
Arterials – LOS “C”

Residential – LOS “B”



West of I-5

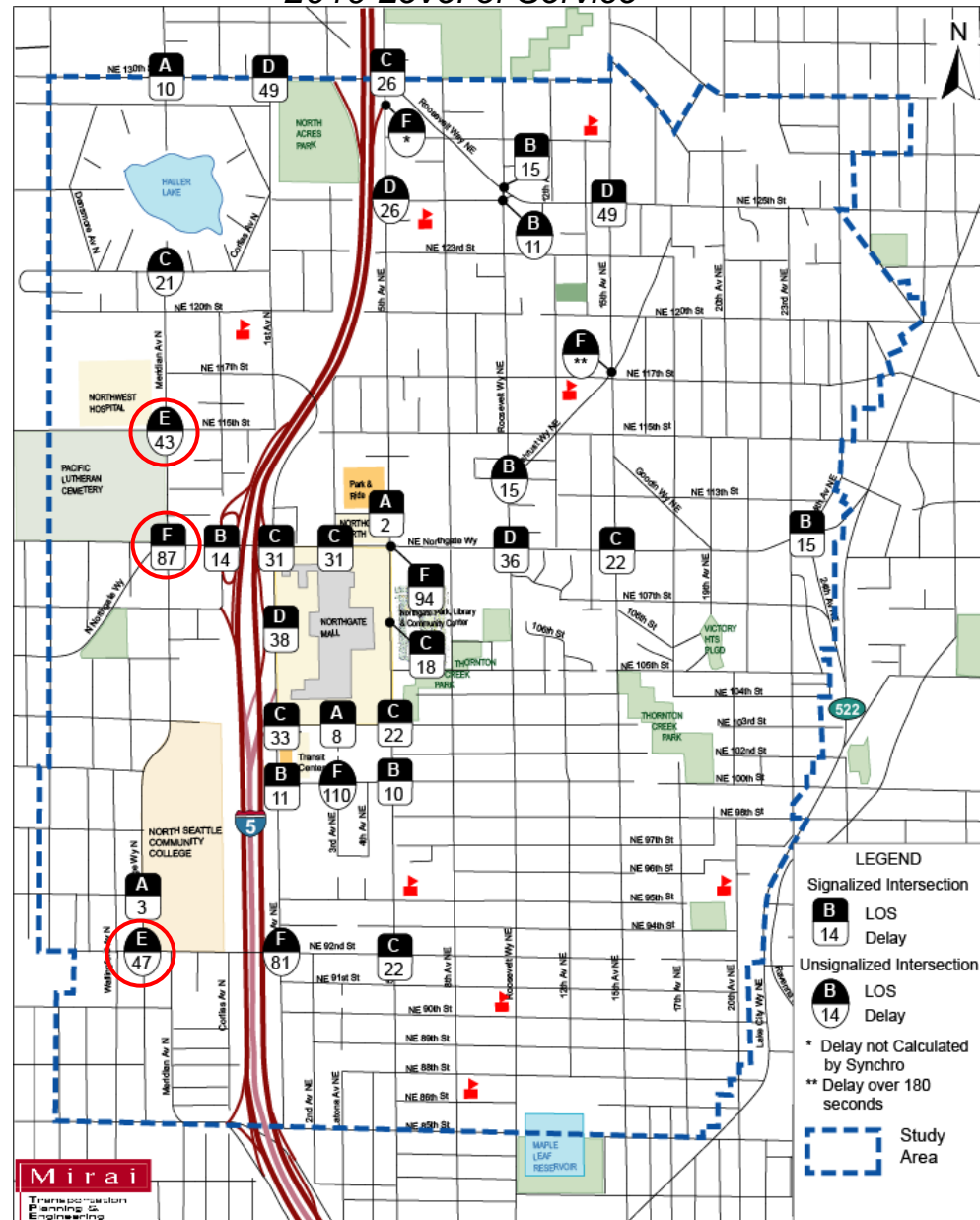
- **High collision rates**
 - Mid-block rates:
 - Northgate Way between Meridian Ave N and Corliss Ave/ SB I-5 Off-Ramp: 2.12 per million annual vehicles
 - Meridian Ave N between Northgate Way and N 107th Street: 1.41 per million annual vehicles
 - Intersection rates:
 - Meridian Ave N & N 107th St : 0.83 million annual entering vehicles



West of I-5

- **Low level of service:**
 - Northgate Way/ Meridian Ave N intersection: LOS F (2010)
 - Meridian Ave N/ N 115th St: LOS E
 - College Way/ N 92nd St: LOS E (Evaluate in the NSCC Master Planning)

2010 Level of Service



1st Ave NE from N 117th St to
N 130th St: Add bike lanes or
widen shoulders to
accommodate bike traffic







1st Ave NE at NE 116th St/ I-5 overpass looking northwest

Meridian Ave N from N 115th St to N 122nd St: Add bike lanes and sidewalks



N 115th St/ Meridian Ave N:
Install a traffic signal



Meridian Ave N from Northgate Way and N 100th St: Provide bicycle lanes on both sides of the street.

College Way from N 100th St to N 92nd St: Provide bicycle lanes on both sides of the street by converting the curb lanes.

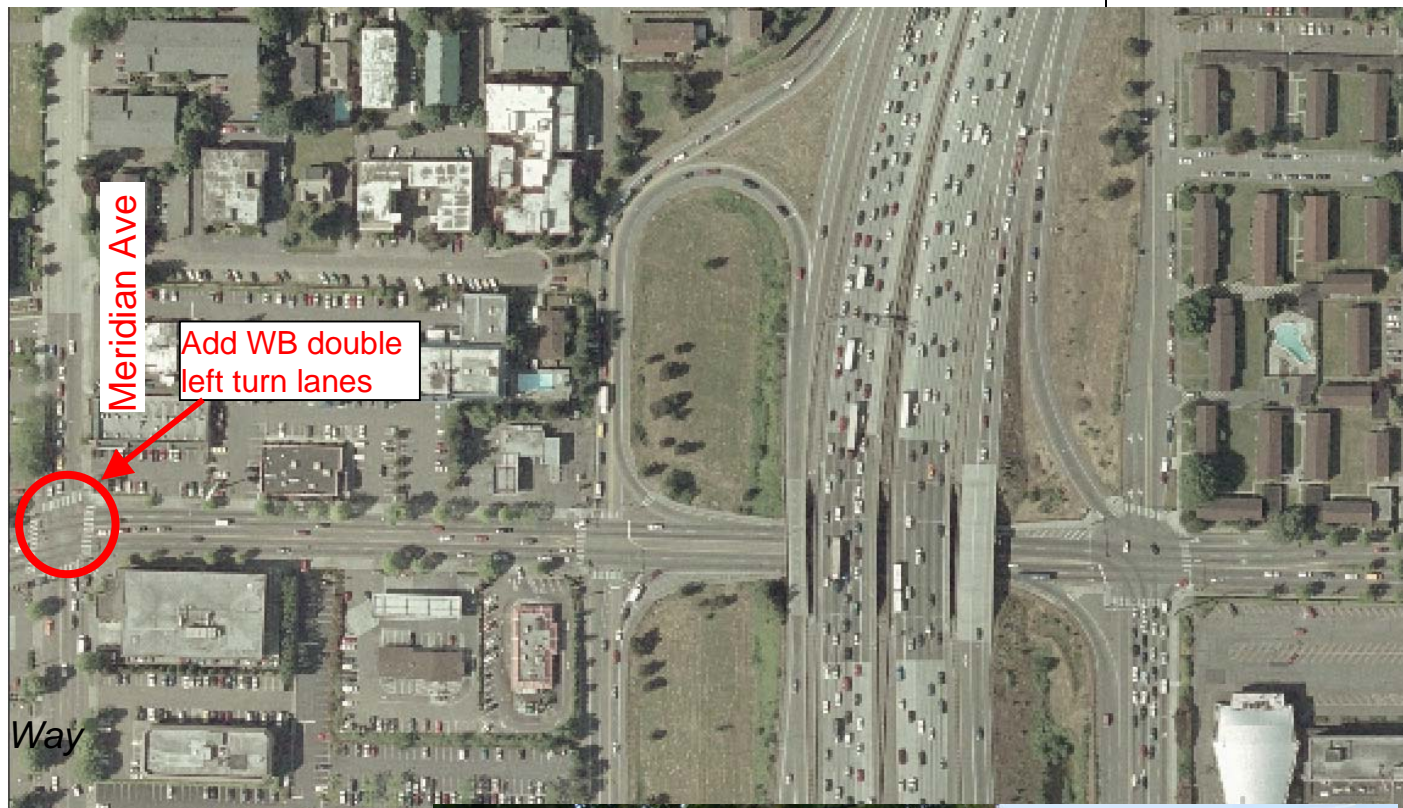
Provide bike lanes on both sides

Provide bike lanes on both sides by converting curb lanes

Northgate Way

NE 92nd St

Northgate Way/
Meridian Ave: Add
westbound-to-
southbound
double left turn
lanes.



*Meridian Ave N/ Northgate Way
intersection*



Northgate Way N
from Meridian Ave N
to Corliss Ave N/I-5
Off Ramp: Provide a
median and restrict
mid-block left turns.
Investigate
feasibility of
providing a business
access street
behind the buildings
located along
Northgate Way.

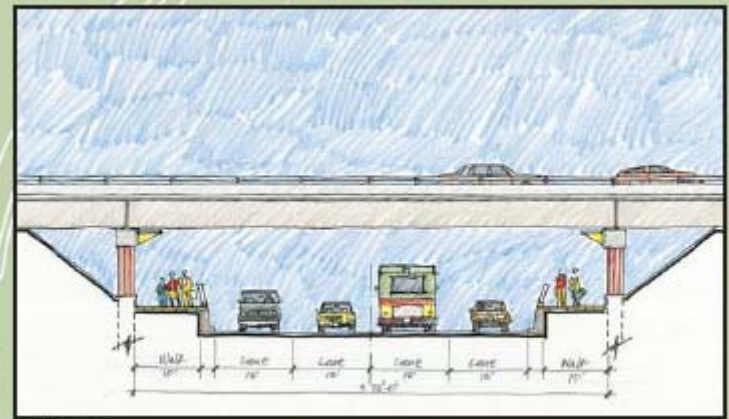
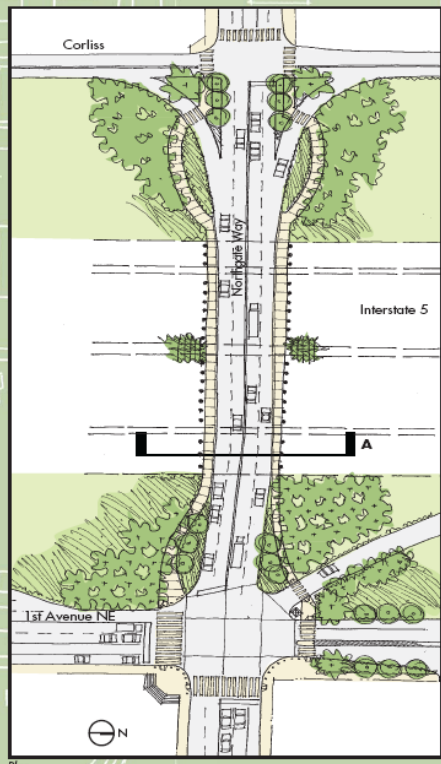


SB I-5 Off
Ramp/Corliss Ave/
Northgate Way:
Allow westbound left
turns from
Northgate Way to
southbound Corliss
Avenue. Extend the
westbound left turn
lane on Northgate
Way under I-5
Overpass by placing
sidewalks behind
the columns

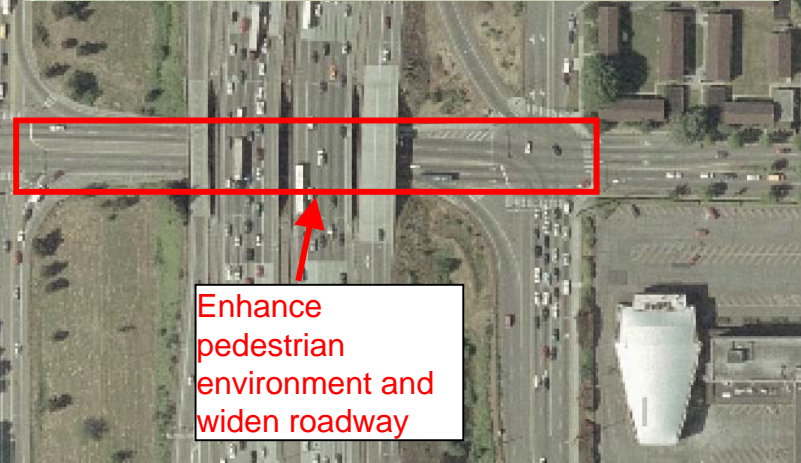


Northgate Way between Corliss Ave N and 1st Ave NE: Improve pedestrian facilities based Open Space/Pedestrian Plan. Place the sidewalks behind the I-5 bridge columns.

Meridian Ave



Section A





SB I-5 On
Ramp/Corliss Ave N/
N 107th St: Provide a
roundabout



Install a
roundabout

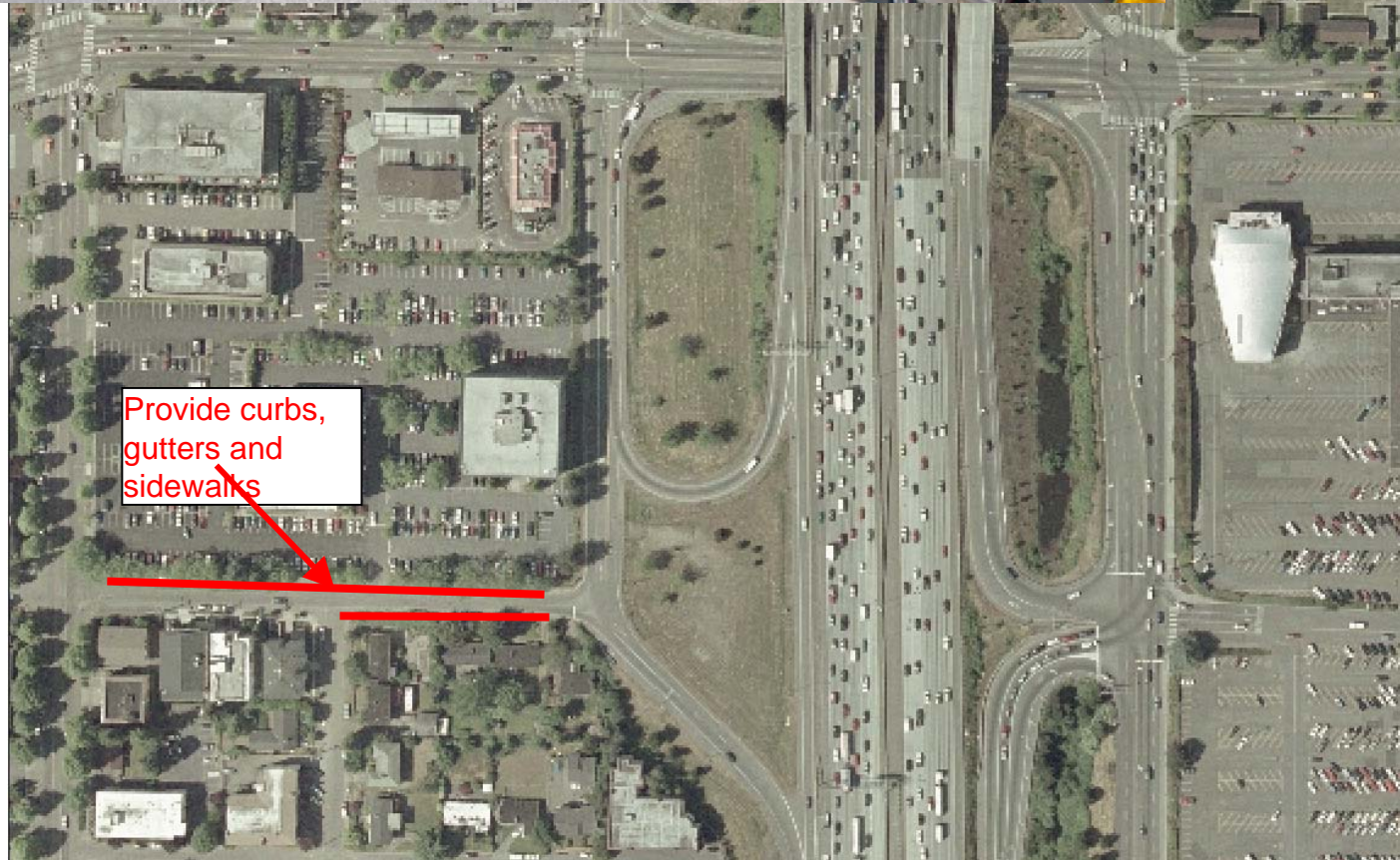


Meridian Ave N/ N
107th St: Provide a
roundabout





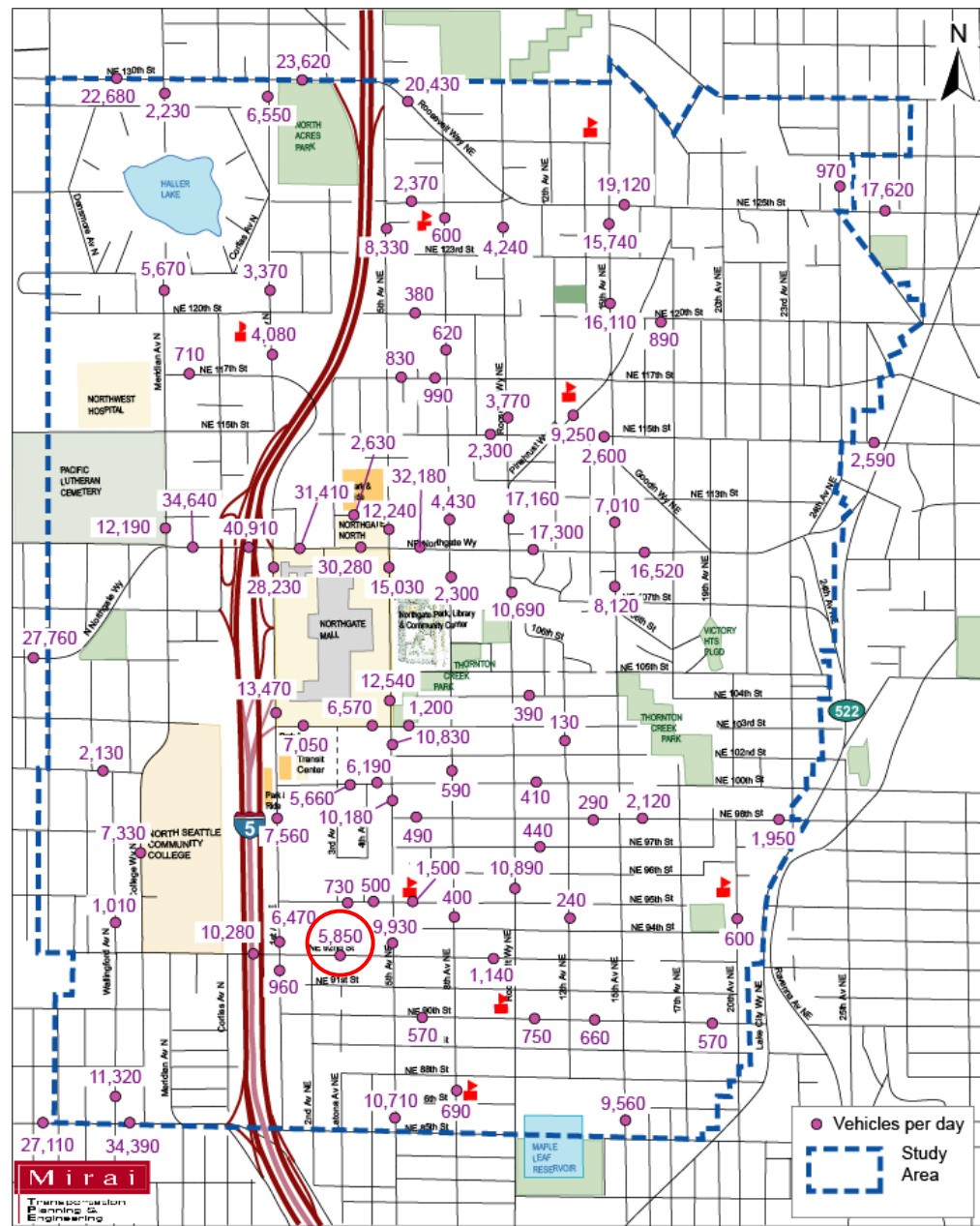
N 107th Street from
Meridian Ave N to
Corliss Ave N/ SB I-5
On Ramp: Provide
curbs, gutters and
sidewalks



92nd Street Corridor

92nd Street Corridor

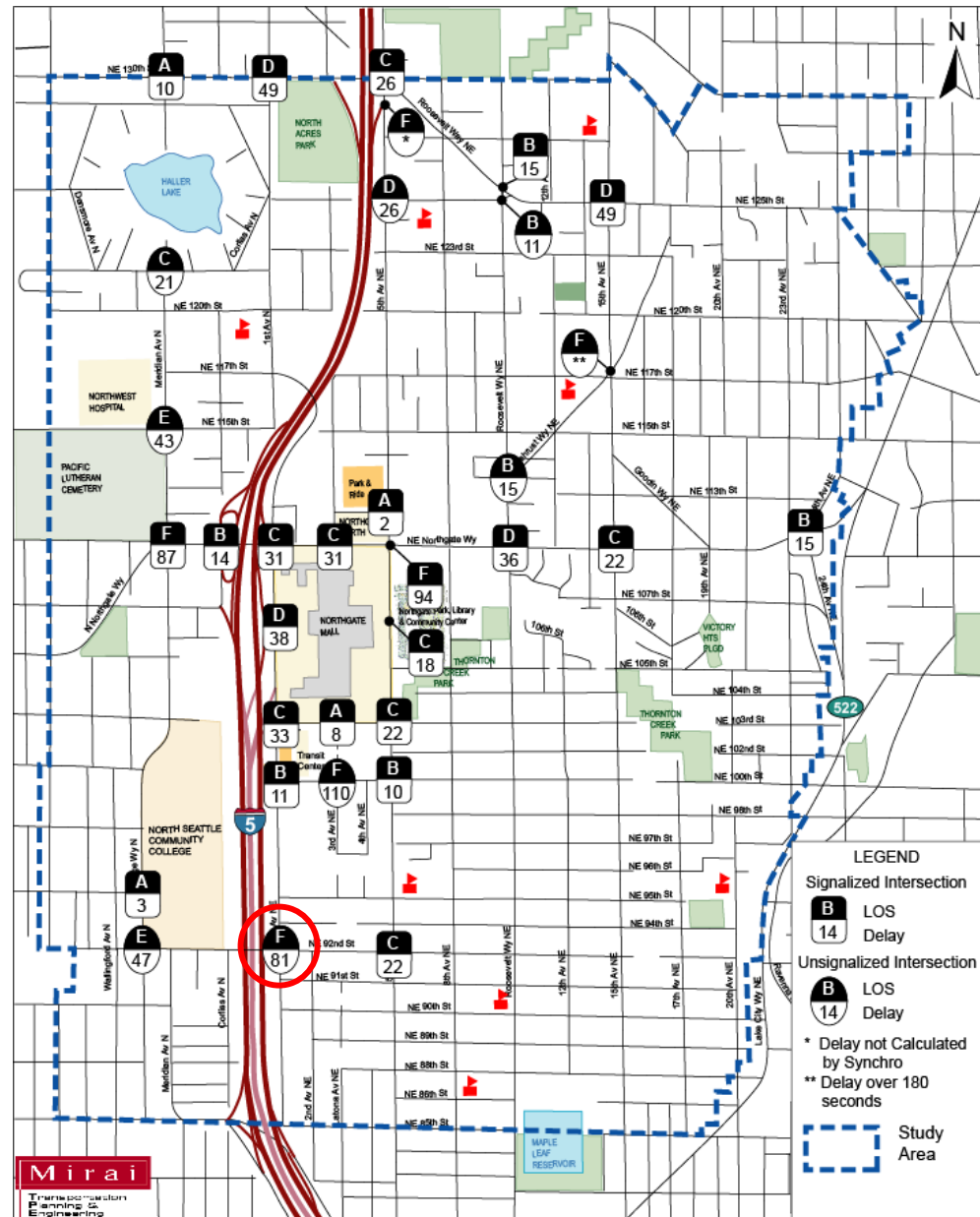
- High volumes of traffic
 - Single family neighborhood: 5,900 vehicles per day



2010 Level of Service

92nd Street Corridor

- Low level of service
 - 1st Ave/ 92nd Street intersection



NE 92nd Street from 1st Ave NE to 5th Ave NE: Provide curbs, gutters and sidewalks on both sides of the street.

NE 92nd Street/ 1st Ave: Install a traffic signal.

